

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussions is respectfully requested.

Claims 1-3 and 5-27 are pending in the present application. Claims 1, 2, 5-10, 13, 14, 17, and 18 are amended and Claim 4 is canceled without prejudice by this amendment.

In the outstanding Office Action, Claim 1 was rejected under 35 U.S.C. § 102(e) as anticipated by Saito et al. (U.S. Patent No. 6,781,872, herein "Saito"); Claim 17 was rejected under 35 U.S.C. § 102(e) as anticipated by Hiner et al. (U.S. Patent No. 6,707,083, herein "Hiner"); Claims 2-16 and 18-27 were indicated as allowable if rewritten in independent form; and the Information Disclosure Statement (IDS) filed on December 4, 2003, was objected to.

Applicant thanks the Examiner for the early indication of allowable subject matter. In view of that indication, independent Claim 1 has been amended to recite the allowable subject matter of Claim 4, and thus Claim 4 has been cancelled. Accordingly, it is respectfully submitted that the rejection of Claim 1 under 35 U.S.C. § 102(e) as anticipated by Saito is moot and Claim 1 and each of the claims depending therefrom are allowable.

The Summary of the Invention section of the specification has been amended to be consistent with amended Claims 1 and 17. No new matter has been added.

Regarding the rejection of Claim 17 under 35 U.S.C. § 102(e) as anticipated by Hiner, Claim 17 has been amended to recite that "each of the magneto-resistance effect elements includes a tunnel barrier layer disposed on the free layer, a pin layer disposed on the tunnel barrier layer and a fixing layer which is disposed on the pin layer and fixes the spin direction of the pin layer." The claim amendment finds support in Figure 9C. No new matter has been added.

Briefly recapitulating, Claim 17 is directed to a magnetic memory device that includes, *inter alia*, first and second conductive layers and a plurality of magneto-resistance effect elements formed between the first and second conductive layers. Each magneto-resistance effect element includes a tunnel barrier layer disposed on a free layer, a pin layer disposed on the tunnel barrier layer and a fixing layer which is disposed on the pin layer and fixes the spin direction of the pin layer.

In a non-limiting example, Figure 9C shows the first conductive layer 15, the free layer 14, the tunnel barrier layer 13, the pin layer 12, and the fixing layer 11.

Turning to the applied art, Hiner shows in Figure 3 a magnetic tunneling junction having a bit line 100 that includes a soft ferromagnetic liner 120 and a nonmagnetic core 110, a free layer 40, a barrier layer 30, a pinned layer 20, and a bottom lead 50. The bit line 100 and the bottom lead 50 are used to provide current to the magnetic tunneling junction, as disclosed by Hiner at column 1, lines 29-33, referring to the device of Figure 2, which is similar in terms of a current supply to the device of Figure 3.

However, Hiner does not teach or suggest that each magneto-resistance effect element includes a tunnel barrier layer disposed on a free layer, a pin layer disposed on the tunnel barrier layer and a fixing layer which is disposed on the pin layer and fixes the spin direction of the pin layer, as required by amended Claim 17.

Accordingly, it is respectfully submitted that Claim 17 and each of the claims depending therefrom patentably distinguish over Hiner.

Regarding the objection to the IDS filed December 4, 2003, Applicant respectfully submits that none of 37 CFR § 1.97 or 1.98 and MPEP § 609 requires that a form that discloses U.S. patent applications should include a column for the examiner's initial, as asserted in the outstanding Office Action at page 4, last paragraph. The Examiner is invited

to specifically indicate the rule or MPEP section that requires the Applicant to provide the column for the examiner's initial for a U.S. patent application. However, to expedite the prosecution of this application, the reference of the above IDS (the reference has been published since this reference was disclosed on December 4, 2003) is listed now on a 1449-form that includes a column for the examiner's initial. Accordingly, it is respectfully requested the disclosed reference be considered and the initialed 1449-form be returned to Applicant's representative.

Consequently, in light of the above comments and in view of the present amendment, the present application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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